

Application No. 09/345,289  
Attorney Docket No. 04MV1073

- 3 included in a computer system and coupled together in a distributed  
4 heterogeneous environment, the method comprising the steps of:
- 5 a. registering and storing metadata describing a meta-  
6 model in the repository;
  - 7 b. generating a set of rules corresponding to the metadata;
  - 8 c. generating a stream of data representing a document  
9 corresponding to the meta-model based on the set of rules;
  - 10 d. transmitting from the repository the stream of data, using  
11 an exporter module; and,
  - 12 e. receiving at the software tool the transmitted stream of  
13 data, using an importer module.

1 2. (Amended) The method as in Claim 1 wherein the repository is MOF-  
2 compliant.

1 3. (Amended) The method as in Claim 1 wherein the software tool is  
2 compliant to UML standard.

1 4. (Amended) The method as in Claim 1 wherein the set of rules is XML  
2 Document Type Definitions corresponding to the metadata.

1 5. (Amended) The method as in Claim 1 wherein the stream of data  
2 conforms to XML Metadata Interchange standard.

1 6. (Amended) A storage medium encoded with machine-readable  
2 computer program code for effecting data interchange among software tools  
3 and repositories in a distributed heterogeneous environment, wherein, when  
4 the computer program code is executed by a computer system having at least  
5 one repository of a first type and at least one software tool of a second type,  
6 the computer system performs the steps of:

- 7 a. registering and storing metadata describing a meta-  
8 model in the repository;
- 9 b. generating a set of rules corresponding to the metadata;

Application No. 09/345,289  
Attorney Docket No. 04MV1073

- 10 c. generating a stream of data corresponding to the meta-  
11 model based on the set of rules;  
12 d. transmitting from the repository the stream of data, using  
13 an exporter module; and,  
14 e. receiving at the software tool the transmitted stream of  
15 data, using an importer module.

1 7. (Amended) The storage medium as in Claim 6 wherein the repository  
2 of a first type is MOF-based.

1 8. (Amended) The storage medium as in Claim 6 wherein the software  
2 tool of a second type is UML-based.

1 9. (Amended) The storage medium as in Claim 6 wherein the rules are  
2 XML Document Type Definitions.

1 10. (Amended) The storage medium as in Claim 6 wherein the stream of  
2 data conforms to XML Metadata Interchange standard.

1 11. (Amended) A method for facilitating data interchange in a computer  
2 system including a MOF-based repository, the method comprising the steps  
3 of:

4 a. registering and storing metadata describing a UML-  
5 based meta-model in the MOF-based repository;

6 b. generating XML Document Type Definitions  
7 corresponding to the metadata of the UML-based meta-model; and

8 c. generating an XML stream corresponding to the UML-  
9 based meta-model using the XML Document Type Definitions.

1 12. (New) The method of Claim 11 wherein the computer system includes  
2 a software tool, the method further comprising:

3 d. transmitting the XML stream from the MOF-based repository to  
4 the software tool, via an exporter module; and

Application No. 09/345,289  
Attorney Docket No. 04MV1073

5 e. receiving the XMI stream, at the software tool, via an importer  
6 module.

1 13. (New) The method of Claim 11 wherein the computer system includes  
2 a second repository, the method further comprising:

3 d. transmitting the XMI stream from the MOF-based repository to  
4 the second repository, via an exporter module; and

5 e. receiving the XMI stream, at the second repository, via an  
6 importer module.

1 14. (New) The method of Claim 13 wherein the second repository is  
2 compliant to UML standard.

1 15. (New) The method of Claim 13 further comprising:

2 f. transforming the received XMI stream into corresponding  
3 metadata, via the importer module; and

4 g. storing the corresponding metadata in the second repository.

1 16. (New) The method of Claim 15 further comprising:

2 h. transmitting a second XMI stream from the second repository to  
3 the MOF-based repository, via a second exporter module; and

4 i. receiving the second XMI stream, at the MOF-based repository,  
5 via a second importer module.

1 17. (New) The method of Claim 16 further comprising:

2 j. transforming the received second XMI stream into  
3 corresponding metadata, via the second importer module; and

4 k. storing the corresponding metadata in the MOF-based  
5 repository.

1